

# **SENIOR MECHANIC/SCADA TECHNICIAN (WATER RECLAMATION FACILITY)**

FLSA Status – Non-Exempt

EEO Code – C/Technicians

Class Code – L334

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## **GENERAL DESCRIPTION OF THE DUTIES**

In a lead capacity, performs routine preventive, corrective, and predictive maintenance on the City's Class IV Water Reclamation Facility (WRF) and associated pump stations. The Senior Mechanic will also be responsible for the maintenance, improvement, and analysis of the Supervisory Control and Data Acquisition (SCADA), Programmable Logic Controllers (PLC's), and other WRF control systems.

## **SUPERVISION RECEIVED**

Works under the general supervision of the WRF Operations Superintendent.

## **SUPERVISION EXERCISED**

In a lead capacity, schedule and assign work for up to 5 FTE. The Senior Mechanic may provide training and orientation to the WRF Mechanics, and to newly assigned personnel regarding policies and practices. Full supervisory responsibility, however, is not a typical function assigned to this position.

## **ESSENTIAL DUTIES AND RESPONSIBILITIES**

The duties and responsibilities listed should not be construed to be all-inclusive. The essential job duties will include other responsibilities as assigned and required.

1. In a lead capacity, schedules and performs preventative maintenance which includes equipment inspections and minor adjustments, equipment lubrication and oil changes, pump and motor alignment, equipment rotation, and minor vehicle maintenance.
2. Performs corrective maintenance, which includes equipment rebuilds, instrumentation, troubleshooting; pump, compressor, and motor repair; minor vehicle maintenance; and, minor HVAC repair.
3. Schedules daily work assignments and plans/coordinates long-term project work in harmony with the overall vision and direction of Wastewater Services and the City of McMinnville.
4. Performs predictive maintenance, which includes vibration analysis, bearing analysis, and electrical measurements.
5. Orders and maintains an inventory of parts and supplies, and maintains the shop.
6. Develops and maintains hazard analysis for assigned tasks.
7. Prepares written reports, schedules work, and maintains records using a computerized maintenance management system.
8. Coordinates mechanic duties and responsibilities with the work performed by contractors, vendors, and other Wastewater Services sections.

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9. Performs work in accordance with federal, state, and City employment and safety laws, rules, and standards.
10. Generates and maintains accurate operational reports, and written documents using word processing, spreadsheet, and other data base software.
11. Enters, retrieves, and manipulates data from computer; uses SCADA (Supervisory Control and Data Acquisition System) control system to operate, troubleshoot, and control treatment plant and pump station processes. Provides trending information; and creates graphs, charts, and spreadsheets for complex problem analysis.
12. Analyzes and maintains Wastewater Services SCADA, PLC, and other control equipment, making recommendations to the WRF leadership on upgrades, expansions, and/or improvements to the existing control systems.
13. Participates as member of the operation and maintenance team to assess conditions, solve problems, and make team decisions.

## **OTHER JOB FUNCTIONS**

1. May perform building maintenance and custodial work within the facility.
2. Maintains proficiency by attending training conferences and meetings, reading materials, and meeting with others in areas of responsibility.
3. Performs other duties as assigned to assist Operators.
4. Maintains work areas in a clean and orderly manner.

## **KNOWLEDGE, SKILLS AND ABILITIES**

### **Knowledge Of:**

- Knowledge of the installation, configuration, and maintenance of Programmable Logic Controllers, Human Machine Interfaces, Single Loop Controllers, and other control systems pertinent to Wastewater Treatment Facilities.
- Working understanding of Wonderware Window Viewer, Window Maker and other SCADA software, including the ability to make changes in order to improve system functionality.
- Intermediate understanding of PLC programming including creating, editing, and troubleshooting ladder logic.
- Diagnosis, troubleshooting, repairs, alignment, instrumentation, and rebuild methods for various types of equipment, including pumps, compressors, motors, HVAC, and vehicles;
- Computerized record keeping systems, scheduling systems, word-processing, and email;
- Routine preventive, predictive, and corrective maintenance methods; and
- Current employment and safety laws.

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## **Skills In:**

- Proper use of mechanics tools and instruments;
- PLC ladder logic;
- Use of Wonderware, including system development;
- Reading and understanding blueprints and drawings;
- Use of computers for report writing, generating spreadsheets, and using databases; and
- Communicating effectively with others.

## **Ability To:**

- Troubleshoot wastewater SCADA and control systems;
- Program and troubleshoot PLC's and SLC's;
- Follow procedures for ordering and restocking parts and supplies;
- Work in confined spaces safely and follow all safety rules; and
- Establish and maintain effective working relationships with others.

## **EXPERIENCE AND EDUCATION**

Any combination of experience and training that demonstrates the knowledge, skills, and abilities to perform the essential job duties and responsibilities for Sr. Mechanic/SCADA Technician is qualifying. A typical way to qualify includes experience as a WRF Mechanic; or experience in industrial maintenance, experience and training in pump maintenance and repair, and experience in the programming and troubleshooting of control system components.

## **DESIRABLE EXPERIENCE, TRAINING AND CERTIFICATIONS**

A Limited Maintenance Electrical License is desirable, but not required.

## **PHYSICAL DEMANDS OF POSITION**

While performing the duties of this position, the employee is frequently required to stand, sit, communicate, reach and manipulate objects, tools, or controls. The position requires mobility. Many duties are physically demanding requiring entry to confined spaces and occasionally moving materials weighing up to 80 pounds. Movement of materials weighing up to 25 pounds may consume up to 15 percent of the work period. Activity and types of duties performed require manual dexterity and coordination. Reasonable accommodation will be made to otherwise qualified individuals with a disability.

## **WORKING CONDITIONS**

Approximately 50 percent of the work period takes place outside of buildings with exposure to all types of weather conditions on a year-round basis, and exposure to sewage, sludge, bio-hazards, dirt, oil, grease,

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fumes, noise, and chemicals. Entry to confined spaces is required on an infrequent basis. Position is subject to emergency on-call response after normal duty hours. May require working on rotating shifts, weekends, and holidays.

## **PHYSICAL AND MENTAL REQUIREMENTS**

While performing the duties of this position, the employee is frequently required to make decisions, use interpersonal skills, analyze problems, perform basic math, and use independent judgment. The WRF Senior Mechanic must be able to stand, sit, bend, kneel, climb, grasp, walk, stoop, crawl, reach, feel, use repetitive motions of hands and wrists, and use repetitive motion of feet. Additionally, the person working in this position must be able to push, lift, pull, and carry 20 pounds on a routine basis and infrequently move objects weighing up to 80 pounds. Agility and precise hand coordination are required. Otherwise qualified individuals with a known disability will be reasonably accommodated.

## **WORKING CONDITIONS**

The work environment involves dirty environments, high and low temperatures, noise, responsibility for the safety of others, and toxic materials on a daily basis; air contamination; confining work space; electrical hazards; high work places; extensive close work; and, vibration on a weekly basis; and occasional improper illumination. Position is subject to emergency on-call response after normal duty hours. May require working on rotating shifts, weekends, and holidays.

Approved By \_\_\_\_\_ Date \_\_\_\_\_  
(Department Director)

Adopted By \_\_\_\_\_ Date \_\_\_\_\_  
(City Manager)

Established: 5/11